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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/790,484	03/01/2004	Dean A. Wieting	790063.00005	9521
26710	7590	03/09/2005	EXAMINER	
QUARLES & BRADY LLP 411 E. WISCONSIN AVENUE SUITE 2040 MILWAUKEE, WI 53202-4497			DEUBLE, MARK A	
			ART UNIT	PAPER NUMBER
			3651	

DATE MAILED: 03/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	10/790,484	WIETING ET AL.
	Examiner	Art Unit
	Mark A. Deuble	3651

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on _____.
 2a) This action is **FINAL**. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-19 is/are pending in the application.
 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
 5) Claim(s) ____ is/are allowed.
 6) Claim(s) 1-19 is/are rejected.
 7) Claim(s) ____ is/are objected to.
 8) Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on ____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) <input type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.
2. Claims 13, 6, 12, 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Henson et al. (U.S. Patent No. 6,044,956) in view of Rauenbuehler (U.S. Patent No. 3,053,376).

As was stated in the previous office action, Henson et al. shows a roller top conveyor chain assembly 10 comprising first and second strands of conveyor chains 20 formed by a plurality of link assemblies. The first and second strands of conveyor chains are arranged substantially parallel to each other for cooperatively conveying an object together. A first roller support frame 32 having a top wall with a plurality of upwardly opening cavities formed therein extends between the first and second link assemblies. The first and second ends of the roller frames are fixed to the first and second link assemblies via apertures 42 and snap fit assemblies 44. Furthermore, while the first and second link assemblies do not have a flat metal piece forming a flight as it is illustrated in the present invention, the ends of the pins extending inwardly from the link assemblies may be viewed as forming flights extending toward the other link assemblies to which the ends of the roller frame are fixed when the word flight is given a broad reasonable interpretation. Rollers 30 are mounted in each of the cavities for engaging the object being conveyed by the first and second strands of conveyor chain. Each of the rollers includes a 36 that is parallel to the first and second strands of the conveyor chain.

Thus, Henson et al. shows all the structure required by claims 1-3, 6, 12, and 14, except for the integral flight extending toward the other of the first and second strands and for the first end of the roller support frame that is supported by the flight. However, as was stated in the previous office action, Rauenbuehler shows a roller top conveyor chain assembly with strands of conveyor chain link assemblies having flights extending from the link members 24 toward the other chain link assemblies. The flights provide a simplified means of attaching roller support frames 25 to the chain link assemblies. Therefore, it would have been obvious to provide flights of the type shown in Rauenbuehler to each of the chain link strands in the conveyor of Henson et al. to provide a simplified means of attaching the roller support frames between the strands of chain link assemblies as taught by Rauenbuehler. When this is done, the resulting conveyor would have all the structure required by claims 1-3, 6, 12, and 14.

3. Claims 1-6, 11-14 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Henson et al. in view of Rauenbuehler as applied to claims 1-3, 6, 12, and 14 above and further in view of Yoshimura et al. (U.S. patent no. 5,265,715).

Henson as modified by the teachings of Rauenbuehler shows generally all that is required by the claims except for the third stand of conveyor chain link assemblies required by claims 4, 11, 13, and 19. However, Yoshimura et al. teaches that the width of a roller top conveyor chain assembly may be extended by providing a third strand of conveyor chain link assemblies substantially parallel to the other link assemblies so that an additional row of rollers may be mounted between the second and third strands of conveyor chain link assemblies. Therefore, it would have been obvious to provide a third strand of conveyor chain link assemblies parallel to the other strands of conveyor chain link assemblies and to mount a second roller support frame

with rollers mounted in the apertures of the second support frame in the conveyor of Henson et al. as modified by the teachings of Rauenbuehler in order to expand the width of the conveyor as taught by Yoshimura et al. When this is done, the resulting conveyor would have all the structure required by claims 1-6, 11-14, and 19.

4. Claims 1-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Henson et al. in view of Yoshimura et al. and Rauenbuehler as applied to claims 1-6, 11-14, and 19 above, and further in view of Costanzo (U.S. Patent No. 6,494,312).

Henson et al., modified in the fashion described above, would have all the structure required by the claims except for the ball roller assemblies fixed to the roller support frame of claims 7-8 and 15-16 and the roller with an axis of rotation defining and an angle greater than 0° or approximately 90° to form the low back pressure conveyor chain assembly of claims 9-10 and 17-18. However, Costanzo teaches that ball roller assemblies mounted on a roller support frame (as illustrated in Figs. 7-8) and rollers having an axis of rotation of approximately 90° to form a low back pressure conveyor chain assembly (as illustrated in Figs. 1-2) may be used interchangeably with the rollers having an axis of rotation parallel to the strands of the conveyor chain (illustrated in Figs 4-6). Therefore it would have been obvious to modify the structure described above by replacing the rollers having an axis of rotation parallel to the strands of the conveyor chain with ball roller assemblies mounted on a roller support frame or rollers having an axis of rotation of approximately 90° to form a low back pressure conveyor chain assembly as taught by Costanzo. When this is done, the resulting conveyor would have all the structure required by claims 1-19.

Response to Arguments

5. Applicant's arguments filed December 28, 2004 have been fully considered but they are not persuasive.

The examiner agrees with applicant's representative that the rejection of claims 1-3, 6, 12, and 14 under 35 U.S.C. 102(b) as being anticipated by Henson et al. and the rejection of claims 1-4, 6, 11-14 and 19 under 35 U.S.C. 103(a) as being unpatentable over Henson et al. in view of Yoshimura et al. (U.S. patent no. 5,265,715) should be withdrawn because these references do not disclose or suggest a flight formed as an integral part of a link assembly that supports an end of a roller support frame.

However, the examiner disagrees with the argument of applicant's representative that nothing in Rauenbuehler suggests supporting an end or a roller support frame with an integral flight as required by the claims. As the applicant's representative points out, Rauenbuehler shows a flange supporting a bracket which supports a shaft of a roller. This flange 24 forms an integral flight on both the first and second strands of conveyor chains 19 of the roller top conveyor and the flights extend from the strand on which they are formed to the other strand as required by the claims. While the flight is used to support a bracket which in turn supports the end of a roller support axle rather than the end of a frame supporting the roller in the fashion illustrated in the present application, Rauenbuehler may still be viewed as teaching that the flights provide an advantageously simplified means of attaching a roller support assembly to the strands. This teaching would suggest to one of ordinary skill in the art at the time of the invention to use such flights in the conveyor of Henson et al. to attach the conveyor support assembly formed by the roller support frames to the strands of conveyor chains. Furthermore,

even if Rauenbuehler does not specifically teach how to attach the roller support frame to the flight, such a simple attachment could easily be achieved without undue experimentation.

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark A. Deuble whose telephone number is (703) 305-9734. The examiner can normally be reached on Monday through Friday except for alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eileen D Lillis can be reached on (703)308-3248. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

md



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